

*SOCIETY FOR THE EXPERIMENTAL ANALYSIS OF BEHAVIOR:
THE FIRST THIRTY YEARS (1957-1987)*

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In the early and mid-1950s, the group of psychologists who had been attracted to the study of operant conditioning found that the journals that seemed most appropriate as outlets for their work were not hospitable toward it. Both the *Journal of Experimental Psychology* and the *Journal of Comparative and Physiological Psychology* did publish studies by some of the most creative contributors to the new field. But, by and large, few members of their editorial boards had much sympathy toward an approach that stressed the behavior of individual organisms and eschewed formal design and hypothesis testing, both hallmarks of most of the work being published in these journals. By the beginning of 1957, this unhappiness had become so intense that a group met at the annual meeting of the Eastern Psychological Association (EPA) and decided to start a new journal. This they did, the *Journal of the Experimental Analysis of Behavior* (JEAB) first appearing in early 1958. Ten years later, heartened by the success of their first venture into publishing, they founded a second journal, the *Journal of Applied Behavior Analysis* (JABA). In 1957, when the first journal was discussed, the group decided to assume complete responsibility for the business as well as the editorial aspects of the enterprise. Instead of turning to a professional publisher, they incorporated the *Society for the Experimental Analysis of Behavior* (SEAB), with the Board of Editors of JEAB serving as the Board of Directors of SEAB.

This account does not pretend to be a scholarly history of SEAB and its two journals. It does not, for example, discuss important antecedents such as the Conferences on the Ex-

perimental Analysis of Behavior and the "Notes" produced by those attending them (J. A. Dinsmoor, 1987), which started with one by B. F. Skinner dated October 9, 1947 (see Figure 2 in J. A. Dinsmoor, 1987) and continued until the twenty-second appeared on April 26, 1951. Nor does it either carefully follow the development of the two journals over the years or critically assess the merit of the scientific contributions that have appeared in their pages. Instead, this article emphasizes only selected aspects of SEAB's history: (1) the founding of JEAB, with emphasis upon the way editorial policies shifted during the first few years and with some comments on the geographical distribution and gender of editorial board members; (2) the founding of JABA, with a citation history of the contents of its first issue as well as comments on geography and gender; (3) the nature of the Society itself, the publisher responsible for the enterprise, with emphasis upon the way the composition of its Board of Directors has changed over the years.

JEAB

Founding of JEAB

The first issue of JEAB appeared in April 1958. Its first editor was Charles B. Ferster, who had earned his PhD in 1950 at Columbia University. He then spent five years with Skinner at Harvard and two years at the Yerkes Laboratories in Orange Park, Florida, where he was in early 1957 (Kelleher & Morse, 1987). Ferster circulated among a number of friends a document entitled "Proposal for the Establishment of a New Journal" just before the 1957 meeting of the Eastern Psychological Association in New York. It started:

Because the editorial policies of existing journals make it increasingly difficult to publish the

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experimental work of a growing number of psychologists and because of the long publication lag, there has been considerable interest in establishing a new journal to meet the needs of this group. I propose therefore that discussions should be undertaken by those individuals who require a new medium for publication, as to 1) the format of the journal; 2) method of financing; 3) selection of individuals for the management of the journal; 4) enumeration of criteria for acceptance of papers; 5) policy with regard to number and length of experimental reports that could be published.

After discussing format and financing, he turned to policy. Anyone who has submitted a paper to JEAB after the first few years will find the editorial procedures set forth for the new journal strange indeed. Here is how Ferster described them in this first proposal:

Selection of individuals for management of the affairs of the journal.

In the first instance the individuals responsible for the management of the journal should be selected in conclave by a small group of those most vitally interested in a new medium of publication. A managing editor would be appointed to be responsible for overlooking the business arrangements, providing a clearing house for correspondence, and supervising the production of the issues for the journal. Editorial power will reside in a large number of editors, perhaps 20 who would each be authorized to accept or reject a manuscript for publication. Since the existence of a new journal of this sort reflects the needs of a specific group of psychologists, it is important that the editors who are chosen reflect this point of view and that methods of election of new editors be designed to continue to reflect the needs of the group. This could be done by allowing each editor, alphabetically in turn, to nominate individuals to fill vacancies. If a second by 20 percent or so of the remaining editors is required, it will insure that no patently ill conceived choice will be made while at the same time it will not perpetuate unrealistic criteria or restrict the representation of new points of view and changing methods of research.

Editorial policy

An author will be free to submit an experimental report or comment to any editor of the journal who will have the authority to accept or reject the paper. If the paper is rejected the author is free to submit it to a second editor. Acceptance of a paper should be on the basis of whether the author has achieved a significant

effect on the behavior of an individual which can be ascribed to an experimental condition and that this result would be of interest to the subscribers of the journal or should be preserved in libraries. Since the basis for selection of the paper is at such a basic level no comment need be made by an editor in rejecting a paper. The rights of the author are safeguarded in that he is still free to submit the paper to a second editor or third editor. The quality of an experimental report should be the sole responsibility of an author. The editor's opinion as to clarity of expression, method of presentation of data and interpretation of findings should not be a factor in the acceptance of the paper. These matters are the responsibility of the author and allowing an editor to coerce them provides a potential control of the behavior of the author by the editor, which in the long run will interfere with original research and thinking. Suggestions for improvements can and should be made to the author by the editor but the disposition of these is entirely at the discretion of the author. These safeguards will undoubtedly produce some papers which are not clearly written or of no interest to some readers. These disadvantages must be weighed against the deleterious long term effects of absolute editorial power. In most cases authors will be disposed to examine carefully the suggestions of the editor, since it is clearly to the best interest of the author.

Since an editor's comments would be accompanied by an acceptance of the paper, the authors disposition to them would not be colored by an implicit threat to the acceptance of the paper.

Some control over the quality of papers would be gained by printing a brief critique following each printed paper. The critique would be written by editors in turn other than the editor accepting the paper.

The decision to go ahead with the new journal was taken on April 12, 1957, during the meeting of the EPA, in a bedroom of the Statler Hotel in New York City. Because operant conditioning was largely a Harvard and Columbia activity, it is not surprising that those who met to consider starting a journal were almost exclusively associated in some way with those two schools. Ferster took snapshots of the meeting; they nicely convey the informality of the setting (Figure 1).

(Incidentally, we shouldn't place undue emphasis on operant conditioners as outsiders; that simply doesn't fit the facts. For instance,



Fig. 1. The birthplace of JEAB: a room in the Statler Hotel, New York, April 12, 1957. Some of the participants were photographed by C. B. Ferster. Top: D. S. Blough, J. J. Boren, J. L. Falk. Center (a composite of two prints): L. R. Gollub, W. H. Morse, T. F. Lohr, N. H. Azrin, P. B. Dews. Bottom left: R. J. Herrnstein, M. Sidman, J. V. Brady. Bottom right: P. B. Dews, J. Anliker. (Photographs courtesy of R. J. Herrnstein)

Fred Keller was serving as president of EPA that year and gave his presidential address at this meeting. B. F. Skinner had given his in 1955. And Harvard and Columbia were among the strongest centers for psychology in the world. Even the difficulties that operant conditioners faced in publishing their findings are somewhat overdrawn. For example, before JEAB existed to provide a more knowledgeable and sympathetic outlet, Ferster had since

1951 published three papers in the *Journal of Experimental Psychology*, two in *Science*, one each in *Psychological Bulletin*, *Psychological Monographs*, *Psychiatric Research Reports*, and the *Harvard Educational Review*—and, with Skinner, the 739-page tome, *Schedules of Reinforcement*.)

A month or so after the EPA meeting, a second document was circulated, this one called "A Plan for Establishing a New Journal." It

Table 1

JEAB's first Board of Editors (August 8, 1957).

Charles B. Ferster, <i>Indiana University Medical Center</i> , Executive Editor
Douglas G. Anger, <i>Upjohn Co.</i> , Apparatus Editor
James E. Anliker, <i>Harvard Medical School</i>
Nathan H. Azrin, <i>Aberdeen Proving Grounds</i>
Donald S. Blough, <i>National Institute of Mental Health</i>
John J. Boren, <i>Merck, Sharpe and Dohme</i>
Joseph V. Brady, <i>Walter Reed Army Institute of Research</i>
Peter B. Dews, <i>Harvard Medical School</i>
Richard J. Herrnstein, <i>Walter Reed Army Institute of Research</i>
Fred S. Keller, <i>Columbia University</i>
O. R. Lindsley, <i>Harvard Medical School</i>
William H. Morse, <i>Harvard University</i>
William N. Schoenfeld, <i>Columbia University</i>
Murray Sidman, <i>Walter Reed Army Institute of Research</i>
B. F. Skinner, <i>Harvard University</i>
Thom Verhave, <i>Eli Lilly Co.</i>

was drawn up by P. B. Dews, C. B. Ferster, W. N. Schoenfeld, and Murray Sidman, but was sent out by Ferster. It was "based on the sense of the meeting at EPA and individual discussions. We found general agreement in regard to fundamental considerations." Here for the first time appeared the name of the new journal: "*The Journal of the Experimental Analysis of Behavior*. Pronounced Jayab or Jeeb." The former version, which Schoenfeld attributes to Sidman (Schoenfeld, 1987), has obviously prevailed. Here also was a list of members of the first Board of Editors (Table 1) and an announcement that C. B. Ferster would serve as the first Editor. (The composition of the first Board will be discussed below.) And here too was the first explanation that the members of the Board of Editors would also be members of the Board of Directors of a nonprofit corporation that would run the journal and be its legal owner.

This document also spelled out a modified version of how submissions would be handled. Under the heading *Editorial Policy* appeared the following:

Contributors will submit manuscripts to the editor who will pass them on to a single associate editor. [The terms "associate" and "consulting" editor were used interchangeably to refer to members of what eventually became the editorial board.] If the associate editor accepts some suggestions for improving the manuscript, the manuscript and the editor's sugges-

tions are returned to the author so he can consider revisions. The author will then return the revised manuscript to the editorial office for processing for publication, unless he requires further assistance from the associate editor. An associate editor may also accept a paper contingent on certain changes in the manuscript. In this case the revised manuscript is returned to the same associate editor. If an associate editor rejects a manuscript the journal editor will return it to the author with a brief general comment. The editor of the journal may review the decision of an associate editor to accept or reject by submitting the manuscript to two additional consulting editors. A majority vote of the three editors will reverse the original decision.

The journal will attempt to give the authors the benefit of professional editorial assistance in matters of style, effectiveness of expression, etc.

Articles of any length from half page notes to longer papers will be published. Contributors will be encouraged to tailor the size of the manuscript to the amount of experimental work. A flexible style will be encouraged which will make it possible to write up short reports of ½ to 2 pages where the data warrant a short report. Initially, financial considerations will limit the number of pages per year that can be published. As the number of subscribers increase however, it is probable that the journal will be able to publish all of the suitable material that is submitted and in any length that may be necessary.

The nature of the material that is published will depend on the editorial board. Their dispositions, in fact, define the scope of the journal. In addition, however, it would be of some value to publish a more explicit statement to guide contributors. Murray Sidman is preparing a draft along these lines, which the editorial board can use as a basis for discussion.

There are advantages if the editorial policy of the journal should tend in the direction of increasing the functions of the associate editors, and conversely decreasing the power and responsibility of the journal editor. First, a large financial factor is involved in secretarial and clerical help for the editor. Initially, this will be provided by makeshift arrangements designed to reduce costs. Ultimately, if the journal is to be self supporting, several thousand dollars a year will have to be provided. Second, the kind of person we want to serve as editor of the journal is not inclined to accept a job that will take large amounts of time away from research.

Anything which will reduce the work load of the editor will make the job more acceptable to the kind of person we would want as editor. It is conceivable that the journal could ultimately "run itself."

On August 8, 1957, Ferster sent out a third document, what he called "an informal call for manuscripts," to the editorial board and to at least some others. He also told the recipients to invite papers from persons whom they knew. He now also spoke of a first issue that should appear in early 1958 and listed "pro-tem" officers: Murray Sidman as president, W. N. Schoenfeld as vice-president, and Ogden R. Lindsley as secretary-treasurer (of the Society; see below). Lindsley was at the Behavior Research Laboratory of Harvard Medical School, Metropolitan State Hospital, Waltham, Massachusetts, and that was given as the address of the journal.

The document also described the publication policy for JEAB much more explicitly than before, enunciating the following principles to serve as guides for the content of manuscripts acceptable to JEAB:

1. JEAB will publish experimental investigations relevant to behavioral processes in individual organisms. Acceptable papers are likely to be those whose data delineate functional relations, explore parameters, demonstrate the relevance of variables, introduce new techniques of control and/or analysis, or establish the existence of a behavioral phenomenon. Review articles of an integrative nature will occasionally be published.
2. Emphasis is to be placed upon adequate presentation of data rather than upon lengthy introductory or discussion sections. Authors are encouraged, however, to present their data concisely within the context of other experimental findings.
3. Stability and replicability of the behavior of individual organisms will provide the chief criteria of the reliability and generality of data.
4. Contributors are encouraged to increase the generality of their findings by presenting the same or related data obtained under different conditions. There is no limitation, beyond that of scientific coherence, upon the amount of data to be included in a manuscript.
5. Presentation of the data of individual subjects is encouraged. When similar results are secured from several subjects, presentation of

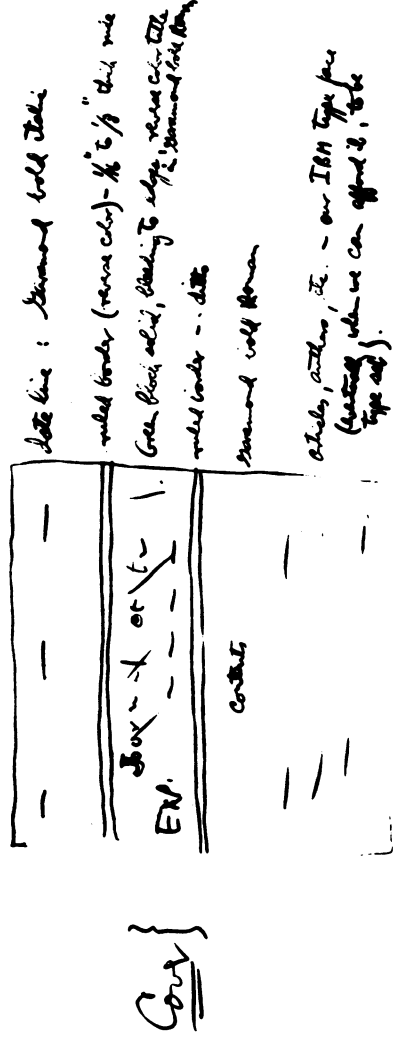
sample sets of individual data is preferred over combined group results.

R. J. Herrnstein (personal communication, August 21, 1987) recalls that there was much discussion within the group about whether journal publication policy, such as that outlined in these five points, should be spelled out in detail on the inside front cover. The final decision was to go with the more general wording that continues to appear in each issue: "... primarily for the original publication of experiments relevant to the behavior of individual organisms."

It is in this memorandum of August 8, 1957, that the *Society for the Experimental Analysis of Behavior* is first mentioned by name. The Society was actually incorporated on October 29, 1957, in Washington, D.C. Three of the members of the Board of Editors who were in the DC area—Joseph V. Brady, Richard J. Herrnstein, and Donald S. Blough—signed the papers and had the honor of being the first formal members of the Board of Directors. The rest of the editors were named to the Board soon thereafter and the first meeting of the full Board occurred April 11, 1958, at the Philadelphia EPA meeting.

But I have gotten ahead of the story. Ferster moved from Orange Park to a new position at the Indiana University Medical School in Indianapolis during the summer of 1957. While worrying about attracting enough suitable manuscripts, he also was trying to figure out how to get the manuscripts set into type. A series of letters between him and Nat Schoenfeld recount how he solved his problems. In one he reported that "JEAB now has a Verityper which is in good working order, along with approximately twenty-five sets of fonts. I found one in the storeroom of the Print Shop which was not used, and which was turned over to me for our use." Later it became clear that an IBM Executive typewriter was faster and more flexible. Letters flew between Indianapolis and New York. Ferster's wife, Marilyn, served as Assistant Editor. She edited all copy and laboriously typed the first two issues, each line being done twice so as to justify the right margins (Gilbert, 1987). Schoenfeld's wife, Serena, who worked for a publisher, Science Press, and knew the most about that area, served as Production Consultant advising her husband throughout (Schoenfeld,

I've talked to. I've spent further time on the cover and stationary with some printing and style experts, to the following effect: -- (a) Cover: All type face to be Starnand, because it looks good, it is available in photo-type for your photo-press, it is widely held by printers so you can deal with local men anywhere in the future. I've been told the following would be okay:



Method a fair page of each issue to be in Starnand -- printer to supply paper for camera selection; paper to be same ~~thing~~ as cover title, but not in reverse color, drawing.

Fig. 2. Part of a letter by W. N. Schoenfeld to C. B. Ferster, June 26, 1957, containing discussion of the JEAB cover. (Courtesy of W. N. Schoenfeld)

1987). Serena, for instance, was the person who chose Cushing-Malloy in Ann Arbor, Michigan, as the printer for JEAB. They printed the journal for its first 28 years.

Schoenfeld made many early decisions that have left a mark on the journal and its organization. For instance, in his first letter to Ferster, three weeks after the initial EPA meeting, he recounted a conversation he had with a potential publisher, Jacques Cattell, who owned Science Press. Schoenfeld was put off by the fact that the publisher of any journal is indeed the owner of that journal and will make decisions that are influenced by the desire for profit. His own calculations had convinced him that as few as 50 subscribers would have been enough to meet the costs of the journal, but Cattell told him that 500 would be needed. He concluded: "In short, my feeling now is that the editorial board be the 'publisher,' with provision for rotation of editor-publisher personnel, etc." (letter of 5/3/57, WNS to CBF). Ferster wrote back on May 6: "Our journal prospects look good, I agree." He went on to discuss the figures for subscriptions, page size, and so on. He didn't react to Schoenfeld's suggestion that they keep control of the business end of the journal but that was indeed done and that is the way it has been to this day; scientists who are or have been heavily involved in editing the journal (those who are on SEAB's Board of Directors) also serve as publisher.

On June 22, Schoenfeld wrote to Ferster and enclosed a format for the journal cover. He suggested using green ink on grey paper. He said, "If you want to see how goodlooking a green ink-grey stock can be, inspect an issue of the *Proceedings of the National Academy of Sciences*" (letter of 6/22/57, WNS to CBF). Four days later he sent a sketch of how he envisioned the JEAB cover (letter of 6/26/57, WNS to CBF). The actual cover of the first issue certainly resembles his conception (Figure 2). But rather than using the Garamond Bold Roman he suggested in his letter, he hired a well-known type designer, Ogg, and then paid him \$40 for the right to the artwork (personal communication, WNS to VGL, 5/18/82).

In the same letter Schoenfeld was ordering stationery. He wrote: "I am thinking of titling you on the letterhead as 'Executive Editor.' Can't recall any other Journal having this title,

but it seems appropriate to our unique editorial set-up." This was accepted by Ferster and the first three Editors of JEAB were called Executive Editors; the title was changed to Editor when A. Charles Catania was elected in 1966 and appointed me Executive Editor to aid him by attending to the business aspects of the journal (Catania, 1987; Laties, 1987).

Progress on the first issue was slow but steady. However, although the issue was labeled "January 1958," in that month Marilyn Ferster was still editing manuscripts and typing the reprints. Furthermore, JEAB was in a race with the stork (Gilbert, 1987). Andrea Ferster was born on February 7, only a few days after the reprints had been sent to New York, where Serena Schoenfeld finished preparing the issue for the printer. By March 13, Nat Schoenfeld could write Ferster that Cushing-Malloy "now has the whole shooting-match in their shop." The printer was instructed to produce 1,200 bound copies plus 300 that were left unbound and could be taken apart and used to satisfy the authors' reprint orders. Some members of the Board of Editors who lived in the Boston area assembled at Og Lindsley's Metropolitan State Hospital laboratory and mailed out the first issue. They also collated the reprints (Lindsley, 1987). The first issue had taken just shy of one year to publish. Lindsley's minutes of the April 11, 1958, SEAB Board of Directors meeting at EPA in Philadelphia record that Charlie Ferster had the pleasure of holding up a copy of Volume 1, Number 1, and saying "The Journal speaks for itself" (Figure 3).

Telling the printer to bind 1,200 copies had been an act of faith, since at the end of March there were only 286 subscribers. Ten years later, when JABA was started, a similar optimistic outlook led to a print order of 5,000 for the first issue when only 1,228 subscribers had actually been signed up. In both cases the decision proved wise and the copies were sold within a few years.

There is naturally much more to the story of the early days of JEAB. For instance, start-up money was needed. A small amount came from members of the first editorial board and their friends, but most was donated by pharmaceutical firms that had been hiring operant conditioners in the mid-50s to study drugs; the burgeoning field of behavioral pharmacology was heavily influenced by the development of

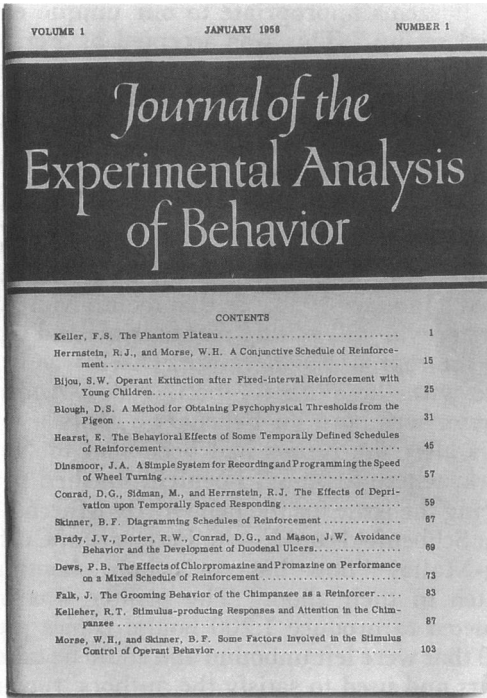


Fig. 3. First issue of JEAB.

the impressive new operant technology and almost all of the major drug houses thought it in their interest to support the growth of the new journal. By the end of 1958, about \$5,000 had been received as gifts, most of it from nine drug houses: CIBA, Hoffmann-La Roche, Eli Lilly, Merck, Sharpe and Dohme, Pfizer, Schering, Smith, Kline and French, Squibb, and Upjohn.

Although announced as a quarterly, after the first two issues had been published, manuscript submissions slowed and issues came out months late. For instance, the third of the four 1958 issues was mailed out in February 1959. By the time John J. Boren took over as Ferster's successor for the fourth volume (1961), the issues had started to appear almost on time: During 1960, the issues labeled January, April, July, and October were actually mailed in May, June, July, and December. When Ferster submitted his final report to the SEAB Board of Directors in April 1961, he could proudly write: "I am pleased to report that the Journal is in sound financial condition and that the quality of its articles and their acceptance by the Psychological profession is such as to guarantee

its continued growth" (Executive Editor's Report, April 1961, p. 9).

He was right. Circulation, which was 385 at the end of 1958, jumped during the next three years to 496, 635, and 860 and reached 1,086 in 1962. As the financial status of the journal improved, three decisions helped ensure the future stability of the enterprise. By far the most important was the hiring of Kay Dinsmoor, who had been working part-time for *Victorian Studies*, a journal published at Indiana University, where Jim, her husband and a former graduate student at Columbia, was in the Department of Psychology (K. Dinsmoor, 1987). Kay started with JEAB in December 1959 as its Business Manager. She worked only half-time until 1963, when she dropped her responsibilities with the other journal and thenceforth devoted her considerable talent and boundless energy solely to JEAB, serving as Managing Editor as well as Business Manager from 1982 until mid-1987. Second, near the end of his term as Editor, Ferster discovered SSPA Typesetting, Inc., a band of four superb craftsmen who operated a small shop in the woods near Indianapolis; the relationship that started in early 1961 lasted until 1984. Lastly, in March 1962, John Boren hired H. Garth Hopkins, a Canadian journalist who moonlighted as Managing Editor of JEAB (and later JABA) through 1978. Hopkins took the lead in negotiating contracts with printers and typesetters as well as redacting all manuscripts with great skill. These developments did much to professionalize the journal's appearance and performance.

I shall here address only two more aspects of JEAB's history. Let us look at JEAB's Board of Editors first in terms of geography and then in terms of gender.

Geography

JEAB started as very much an eastern club. It is instructive to examine the geographical locations of the editors at various times in the journal's history. I have indicated these for 1958, 1964, 1974, and 1982 in Figure 4.

When the first issue appeared in April 1958, all 16 editorial board members were east of the Mississippi River (Figure 4, top). Twelve were located in the Boston to Washington corridor. Azrin had just moved to Anna, Illinois. Anger was at the Upjohn Company in Kalamazoo, and Verhave was at Eli Lilly Company

in Indianapolis. Ferster edited the journal from the Indiana University Medical Center in Indianapolis until 1961. Then, John J. Boren edited JEAB for three years from Walter Reed Army Institute of Research in Washington, D.C.

In late 1963, Nate Azrin at Anna State Hospital in Anna, Illinois, became Editor. The Board had doubled in size but remained largely an eastern enterprise; only two members of the Board were in the West (Figure 4, second from top).

A. Charles Catania succeeded Azrin and so JEAB was at New York University for the three years 1967 through 1969. Then Stanley S. Pliskoff became Editor and the journal spent 1970 through 1972 in Orono at the University of Maine. I served as Editor for 1973 through 1976 and so the journal was in upstate New York at the University of Rochester. By 1974 the editorial board (plus the Associate Editors and Editor) numbered 44 and the geographical spread had increased markedly (Figure 4, second from bottom). About one quarter of the Board was in the Midwest or South and there were five members in the Far West.

Eight years later, in 1982, Michael D. Zeiler had finished his term (1977 through 1979), editing the journal in Atlanta, Georgia, at Emory University, and John A. Nevin was the Editor (1980 through 1983) in Durham at the University of New Hampshire. The board had shrunk to 36 and the Midwest had lost much of its strength (Figure 4, bottom). One member was in Mexico City, one was in New Zealand, two were in Great Britain, and four were in Canada—one each in Vancouver, Halifax, Toronto, and London, Ontario. This points up an important development in the history of the journal: By 1982 it finally had become truly international in its editing as well as in its content. For a long time Canadians had been on the Board of Editors. Only recently were overseas members added. And in late 1982 Stephen Lea of the University of Exeter, England, was made an Associate Editor. When Philip Himeline took over as Editor for 1984 through 1987, JEAB went to Temple University in Philadelphia. The international character of the journal was enhanced when he made Dianne McCarthy of the University of Auckland, New Zealand, an Associate Editor. The journal moved to the west coast for the first time in late 1987 when Edmund Fan-

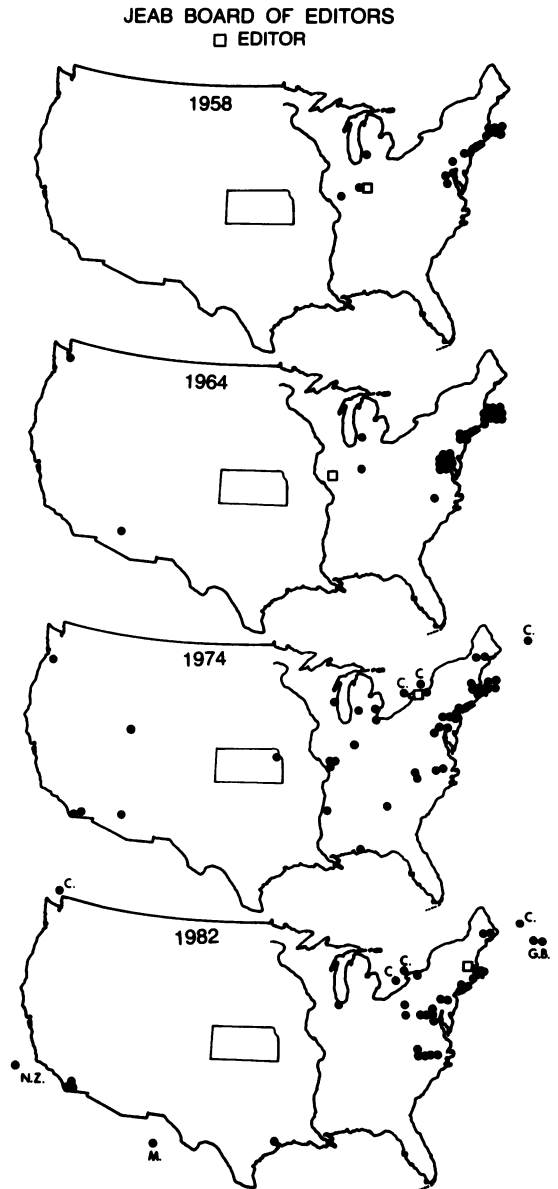


Fig. 4. Geographical distribution of the editorial board members (including Associate Editors) of the *Journal of the Experimental Analysis of Behavior* in 1958, 1964, 1974, and 1982. The Editor's location is marked by an open square. Abbreviations: C. = Canada; G.B. = Great Britain; M. = Mexico; N.Z. = New Zealand.

tino of the University of California, San Diego, became Editor for 1988 through 1991.

Gender

JEAB started as an exclusively male group. This was not particularly surprising, given the

Table 2
JEAB: Women in editorial positions.

Year	Board of Editors		Associate Editors	
	<i>N</i>	Names	<i>N</i>	Names
1958–1969	0		0	
1970	1	B. A. Ray	0	
1971	1	B. A. Ray	0	
1972	2	B. A. Ray E. F. Segal	0	
1973	3	E. F. Segal P. M. Blough A. R. Jwaideh	0	
1974	3	E. F. Segal P. M. Blough A. R. Jwaideh	0	
1975	3	P. M. Blough A. R. Jwaideh R. Pierrel-Sorrentino	0	
1976	2	R. Pierrel-Sorrentino E. F. Segal	0	
1977	3	R. Pierrel-Sorrentino E. F. Segal M. C. P. Boren	1	P. M. Blough
1978	3	E. F. Segal L. R. Cohen S. Sperling	1	P. M. Blough
1979	3	L. R. Cohen S. Sperling J. DeWeese	1	P. M. Blough
1980	5	L. R. Cohen S. Sperling J. DeWeese N. K. Innis C. Mandell	1	E. F. Segal
1981	5	J. DeWeese N. K. Innis C. Mandell P. M. Blough N. S. Hemmes	1	E. F. Segal
1982	4	N. K. Innis C. Mandell P. M. Blough N. S. Hemmes	1	E. F. Segal
1983	4	P. M. Blough N. S. Hemmes D. McCarthy F. K. McSweeney	0	
1984	3	D. McCarthy F. K. McSweeney C. Mandell	0	
1985	6	D. McCarthy F. K. McSweeney C. Mandell N. A. Ator E. F. Segal P. M. Blough	0	
1986	5	C. Mandell N. A. Ator E. F. Segal P. M. Blough V. Lee	0	

Table 2
(Continued)

Year	Board of Editors		Associate Editors	
	<i>N</i>	Names	<i>N</i>	Names
1987	5	N. A. Ator P. M. Blough C. Mandell V. Lee C. L. Wetherington	1	D. McCarthy

small number of female professors and graduate students in experimental psychology in the 50s. The editorial board remained all male until 1970, when a Columbia PhD, Barbara Ray, joined it. (Alice Jwaideh was named to the Board in 1966 but resigned after a few months and became Index Editor, a post she held for 10 years—joining the Board of Editors as well, however, in 1973.) In 1977, Patricia M. Blough became the first female Associate Editor of JEAB, to be followed by Evalyn F. Segal in 1980 and Dianne McCarthy in 1987.

Table 2 shows that the numbers have not yet risen to a particularly spectacular extent. But neither have the corresponding numbers for articles written by women: During 1980 and 1981, 12 of the 132 articles published (9%) had female first authors. During that period, approximately 18% of the editorial positions were held by women. By 1985 and 1986, 13% of the articles had female first authors and 14% of the editors were women. The problem appears not one of achieving editorial slots on the journal, but rather in obtaining satisfactory academic jobs; several women who have been members of the editorial board have left psychology.

JABA

Founding of JABA

The question of a home for applications research was first raised within the Society in 1959, nine years before JABA appeared. In October, 1959, just 18 months after the first issue of JEAB, Murray Sidman had suggested to Ferster that he publish this notice:

With this issue, J.E.A.B. inaugurates a new section, 'Applications of Behavioral Principles and Technology.' We have been receiving an

increasing number of papers, some experimental, some clinical, some combinations of both, which do not add new information or systematization but which demonstrate or investigate new applications of existing knowledge and techniques. We feel that such papers represent a healthy trend. They constitute a sign that our science is something more than a laboratory exercise. More importantly, they provide a source of validation for laboratory-derived principles and techniques. Publication of such papers represents a logical outgrowth of one of our chief editorial criteria—actual or potential interest on the part of our readers.

Examples of the kind of work that is likely to fall into this category:

1. Much of Lindsley's work with psychotics.
2. Goldiamond's work on stuttering.
3. Ferster's work with autistic children.
4. Ayllon's work on establishment of self-feeding behavior in psychotic patients.
5. Long's work with children.
6. Sidman's work on aphasia.

So far as I can determine, nothing came of the idea; no such notice appeared in JEAB, although occasional papers on applied topics were published. Of course, a basic sympathy towards applications was not surprising; the first three editors of JEAB—Ferster, Boren, and Azrin—were subsequently to spend a good part of their careers working in the applied area.

The actual founding of a second journal was first discussed by the SEAB Board on April 6, 1967. Here is how Kay Dinsmoor, who served as Assistant Secretary-Treasurer of SEAB, recorded the event in the minutes:

A discussion of the need for a journal with high scientific standards for publication of applications to behavior modification was initiated by B. F. Skinner. After discussion of the advantages of the Society's sponsoring such a publication and of using the established publication mechanism of the *Journal of the Experimental Analysis of Behavior*:

Upon motion duly made, seconded and carried, it was RESOLVED that N. H. Azrin investigate the possibility of initiating such a publication under the auspices of the Society, and that he report on his findings at a September 1967 meeting of the Board of Directors.

Azrin, who had finished his three-year term as JEAB's editor in 1965, conducted a tele-

phone survey of about a dozen likely contributors of hard-data articles and found that there were at least 23 manuscripts that would be promised to the new journal if it were started. He also met with a lot of enthusiasm for a new journal, with the potential contributors all promising to consider it their first choice as an outlet for their work.

The APA meeting that year was in Washington. On September 3, 1967, at the Division 25 Hospitality Suite in the Shoreham Hotel, the Board met again. Present and constituting a quorum were Chairman of the Board and Editor of JEAB, A. Charles Catania, and Directors Azrin, Boren, Dews, Ferster, Holz, Latties, Pliskoff, Sidman, Skinner, Verhave, and Weiss. After some discussion of the reprinting of back issues in volume form, of back issues sales, of subscription figures, of the policy on reviews and theoretical papers, of the length of time a student should be allowed to purchase JEAB at the heavily discounted student rate, and of some invited book reviews, the meeting finally turned to the question of a second publication. Azrin reported on his investigations and recommended that the Society sponsor the journal. After some discussion, a motion establishing the new journal was adopted, simply stating that the second journal would publish "applied behavioral studies." Further discussion led to the establishment of a committee charged with the task of nominating the new Editor and then acting in an advisory capacity to him during his three-year term of office. The three former Editors of JEAB—Ferster, Boren, and Azrin—comprised the committee. The meeting adjourned for 20 minutes while they met in one corner of the room. The Board then reconvened and, acting upon the recommendations of the committee, unanimously elected Montrose M. Wolf as Editor of the new journal.

The choice of Mont Wolf meant that for the second time in 18 months the Board had decided to entrust a relatively young scientist with the task of editing one of its journals. Charles Catania had been 29 years old when he was elected Editor of JEAB in April 1966 and only 30 when he actually started his term of office. Wolf was 32 when made editor of JABA. Catania had been only five years past his PhD; Wolf was only four years past his. It was particularly important with JABA to enlist the whole effort of a first-rate person

because the first few years of a journal are so important in setting policy. The instant success of the new journal testified to the wisdom of the Board's selection.

Incidentally, so far, editing both JEAB and JABA has usually been a young man's game. Ferster was 34 when he started editing JEAB; his successors started their terms at 32 (Boren), 32 (Azrin), 30 (Catania), 39 (Pliskoff), 46 (Laties), 43 (Zeiler), 47 (Nevin), 43 (Hine-line), and 48 (Fantino), the mean being 39.4 years. For JABA the ages were 32 (Wolf), 38 (Baer), 33 (Risley), 45 (Agras), 37 (O'Leary), 38 (Barlow), 35 (Iwata), and 43 (Bailey), for a mean of 37.6 years.

The choice of Wolf as the first Editor of JABA also ensured that the Department of Human Development at the University of Kansas would remain dominant in this area for some time to come. Wolf immediately appointed Don Baer to be Associate Editor. Baer succeeded Wolf three years later but served for only a year before going off to Australia on a sabbatical. He in turn was succeeded by Todd Risley, also from Kansas. This talented trio set the style and standards for the new journal.

The first issue of JABA was published just in time for 1,000 copies to be distributed free at the Spring 1968 meeting of EPA in Washington, DC. The new venture's financial success was assured when most of JEAB's subscribers signed up for the second journal and a strong demand for JABA quickly developed in completely new audiences. JABA finished 1968 with 4,271 paid subscribers; JEAB had only 3,005. It was obviously a timely move to start the applied journal.

Launching a second journal had proved almost easy, given the presence of a functioning organization with ten years of publishing experience and money in the bank. Mary Louise Wright (then Sherman) was appointed Business Manager in 1967 and proved a quick student under Kay Dinsmoor's tutelage. She has provided the continuity for JABA that Kay has given JEAB and she celebrates her 20th year with that journal in 1987—as do we. The presence of a strong and effective full-time Business Manager meant that the Editor could concentrate on editorial matters, a luxury that Ferster did not have until Kay Dinsmoor was hired half-time near the end of JEAB's second year.

Part of the discussion about establishing

JABA included speculation that it would be a more popular journal and would therefore generate more revenue—and that it might eventually be called upon to subsidize the basic-research journal. Such subsidization has never been needed, partly because JEAB has always earned a healthy income from advertising.

Citation History of First Issue

JABA was also an obvious intellectual success from the beginning. The first issue was a remarkable product. It contained eight research articles. I have examined the citation histories of these articles (Figure 5). The bottom two curves, each with between 40 and 50 cumulative citations by 1980, represent an article on reinforcer sampling by Ayllon and Azrin and an article on a shock-administering cigarette case by Powell and Azrin. These numbers of citations over 12 years are highly respectable for a research article. (The appearance of the oft-cited Ayllon and Azrin token-economy book at about the same time undoubtedly cut heavily into citations of the reinforcer sampling article.)

The next pair up are an article on contingent and noncontingent social reinforcement of cooperative play of a preschool child (Hart, Reynolds, Baer, Brawley, & Harris) and one on group contingencies and classroom study behavior (Bushell, Wrobel, & Michaelis). Next come articles on using a mother as therapist with her own child (Zeilberger, Sampen, & Sloane), on suppressing life-threatening behavior in an autistic child (Risley), and on modifying disruptive classroom behavior by systematically varying the teacher's behavior (Thomas, Becker, & Armstrong). Next is the classic paper by Hall, Lund, and Jackson on teacher attention and study behavior, which was the lead article of the issue.

The first issue of JABA also contained an influential note by Lindsley describing a reliable wrist counter for recording behavior rates, and two other articles, "Good-bye, Teacher . . ." by Fred Keller and "Some Current Dimensions of Applied Behavior Analysis" by Baer, Wolf, and Risley. Both articles have had a phenomenal history. The Keller article was cited 360 times through 1980, and—not shown on the graph—49 more times through 1986. Baer, Wolf, and Risley was cited 435 times through 1980—and 306 times

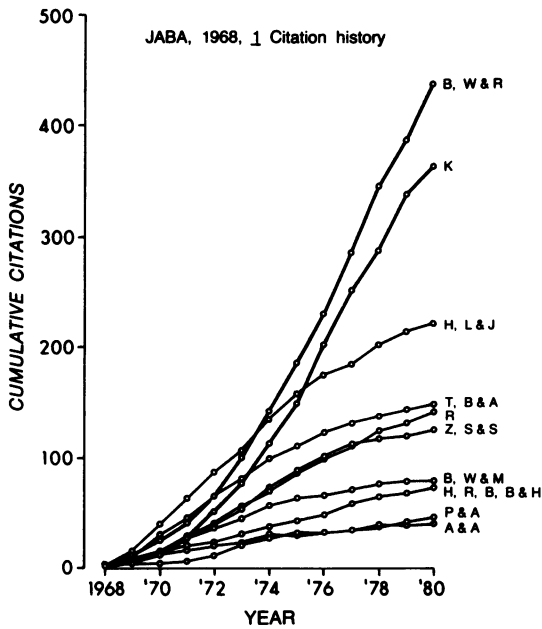


Fig. 5. Citation history of the articles that appeared in the first issue of the *Journal of Applied Behavior Analysis*. The figures were taken from volumes of *Science Citation Index*.

more through 1986. All in all, the new journal got off to a healthy start.

Geography

The first Board of Editors of JABA is shown in Table 3. Note the affiliations. The distinctive midwestern cast of this group is shown in Figure 6 (top). Six editors were from Lawrence, Kansas, or nearby. Recall that the JEAB Board of 1958 had 16 members in the East, none west of the Mississippi. The map shows that about half of the 24 members of the original JABA Board were located west of the river. Six years later, in 1974, the journal was still in Lawrence, now under the editorship of Todd Risley who had succeeded Donald Baer. The Board had more than doubled in size to 64 members and more than half of these were west of the Mississippi (Figure 6, middle). A heavy concentration remained in the immediate vicinity of Lawrence.

Eight years later, in the Spring of 1982, the map shows a distinct decrease of editorial board members from the Midwest (Figure 6, bottom). This is not particularly surprising since during that period JABA had spent three years with Stewart Agras at Stanford University,

Table 3

JABA's first Board of Editors (1968; Vol. 1, No. 1).

Montrose M. Wolf, <i>U. of Kansas</i> , Editor
Donald M. Baer, <i>U. of Kansas</i> , Associate Editor
Victor G. Latties, <i>U. of Rochester</i> , Executive Editor
T. Ayllon, <i>U. of Pennsylvania</i>
Nathan H. Azrin, <i>Anna State Hospital</i>
Albert Bandura, <i>Stanford University</i>
Wesley C. Becker, <i>U. of Illinois, Urbana</i>
Jay S. Birnbrauer, <i>U. of North Carolina</i>
C. B. Ferster, <i>Georgetown U.</i>
Israel Goldiamond, <i>U. of Chicago</i>
James G. Holland, <i>U. of Pittsburgh</i>
Fred S. Keller, <i>Western Michigan U.</i>
Peter J. Lang, <i>U. of Wisconsin</i>
Ogden R. Lindsley, <i>U. of Kansas</i>
O. Ivar Lovaas, <i>UCLA</i>
Jack L. Michael, <i>Western Michigan U.</i>
Gerald R. Patterson, <i>U. of Oregon</i>
Todd R. Risley, <i>U. of Kansas</i>
James A. Sherman, <i>U. of Kansas</i>
Murray Sidman, <i>Massachusetts General Hospital and Harvard Medical School</i>
Gerald M. Siegel, <i>U. of Minnesota</i>
B. F. Skinner, <i>Harvard U.</i>
Joseph E. Spradlin, <i>Parsons Research Center</i>
Arthur W. Staats, <i>U. of Hawaii</i>

Added for Vol. 1, No. 3:

W. Stewart Agras, *U. of Vermont*
 B. L. Hopkins, *Southern Illinois U.*
 Harold Leitenberg, *U. of Vermont*
 Howard N. Sloane, *U. of Utah*

Palo Alto, California, three years with K. Daniel O'Leary at SUNY-Stony Brook, New York, and had just moved upstate to SUNY-Albany, to be edited by David Barlow. Of the 57 editors, 39 were now from east of the Mississippi. At first glance this appears to signal the end of a dominance of the area by the University of Kansas. But this conclusion would be premature; many of the editors now dispersed throughout the country were trained in Kansas but were forced by economic factors to relocate in less intellectually active parts of America. Brian Iwata succeeded Barlow, and JABA was located in Baltimore at the Johns Hopkins University School of Medicine for 1984 through 1986. It is now in Tallahassee at Florida State University under Jon Bailey for 1987 through 1989.

Gender

Like JEAB, JABA editing was first an exclusively male enterprise. The first women to

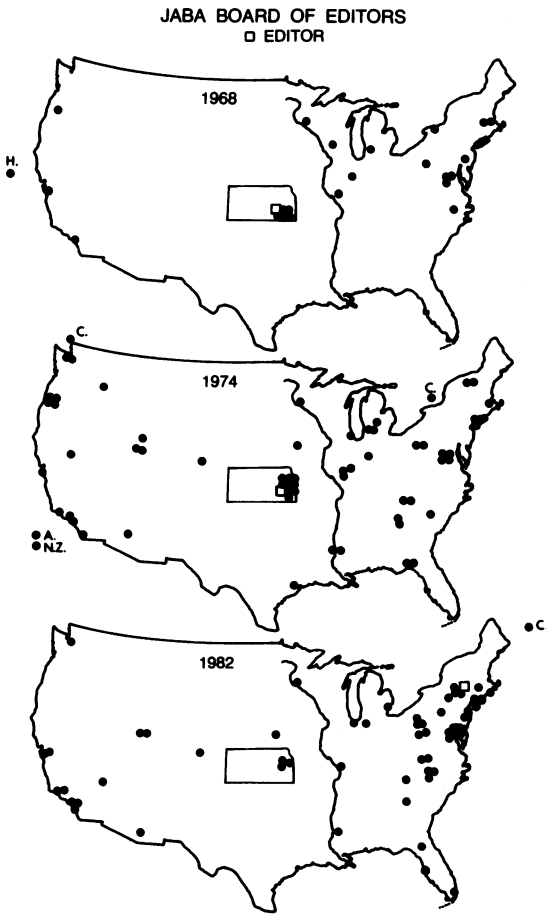


Fig. 6. Geographical distribution of the editorial board members (including Associate Editors) of the *Journal of Applied Behavior Analysis*. The Editor's location is marked by an open box. Abbreviations: A. = Australia; C. = Canada; H. = Hawaii; N.Z. = New Zealand. The state of Kansas is outlined.

be appointed to the Board were Martha Bernal, Stephanie B. Stolz, Beth Sulzer-Azaroff, and Barbara H. Wasik, all in 1972 (Table 4). A year later, Wasik was an Associate Editor. Since that time (through 1987), seven more women have served as Associate Editors: Stolz, Sulzer-Azaroff, Emily Herbert-Jackson, Sandra Twardosz, Rosemary O. Nelson, Laura Schreibman, and Nancy A. Neef.

During 1980 and 1981, 28% of the editorial positions were held by women. During the same period, 23% of the articles in the journal had female first authors (20 of 88). Comparable figures for 1985 and 1986 combined are 23% (editorial positions) and 29% (first authors).

Table 4

JABA: Women in editorial positions.

Year	Board of Editors		Associate Editors	
	N	N	Names	
1968	0	0		
1969	0	0		
1970	0	0		
1971	0	0		
1972	4	0		
1973	5	1	B. H. Wasik	
1974	5	1	S. B. Stolz	
1975	7	2	S. B. Stolz	
			B. Sulzer-Azaroff	
1976	12	2	S. B. Stolz	
			B. Sulzer-Azaroff	
1977	12	3	E. Herbert-Jackson	
			S. B. Stolz	
			S. Twardosz	
1978	12	3	R. O. Nelson	
			S. B. Stolz	
			S. Twardosz	
1979	12	2	R. O. Nelson	
			S. Twardosz	
1980	13	1	L. Schreibman	
1981	16	1	L. Schreibman	
1982	17	1	L. Schreibman	
1983	17	1	L. Schreibman	
1984	15	0		
1985	12	1	N. A. Neef	
1986	11	1	N. A. Neef	
1987	14	1	N. A. Neef	

SEAB

Finally, let us turn to the Society itself. First of all, it should be made clear that SEAB is not an honorary society. Its members are not chosen because they have done exemplary research; rather, they are chosen because they are thought capable of helping run scientific journals. The members have always been drawn from the ranks of those most actively involved with JEAB or JABA. Usually that has meant that they were working as Associate Editors and were considered likely to continue their involvement with the journals for some time to come. They also must promise to attend almost all the meetings of the Board for the eight years of their term. Inability to meet this last requirement has occasionally ruled out membership for an otherwise editorially active person. This is unfortunate, perhaps, but necessary; the Society has a large budget (over \$320,000 in 1986) and large responsibilities; it needs the active concern of a small group of professionals who are willing to devote a fraction of their effort to its health.

Table 6
Comparative data on journal prices and circulation (1986).

Journal (publisher)	Total pages	Institutional price (\$)		Paid circulation
		Per yr.	Per page	
American Journal of Psychology (UIP)	571	30	.05	2,600*
Animal Learning & Behavior (PS)	454	48	.08	1,323
Behavior Modification (Sage)	512	62	.12	1,435
Behavior Therapy (AABT)	564	90	.14	3,500**
Behavioral Assessment (AABT)	389	90	.23	2,500*
Behavioral Neuroscience (APA)	893	106	.12	2,566
Behaviour Research and Therapy (Pergamon)	717	175	.24	4,300*
Child Development (UCP)	1,547	95	.06	7,710
Cognitive Psychology (Academic)	519	99	.19	1,791
Cognitive Therapy and Research (Plenum)	720	120	.17	1,121
Journal of Applied Behavior Analysis (SEAB)	448	36	.08	5,370
Journal of Comparative Psychology (APA)	440	40	.09	1,947
Journal of Behavioral Medicine (Plenum)	610	120	.20	1,357
Journal of Consulting and Clinical Psychology (APA)	884	124	.14	11,016
Journal of Experimental Psychology: Animal Behavior Processes (APA)	430	42	.10	2,609
Journal of Experimental Psychology: Learning, Memory and Cognition (APA)	637	84	.13	3,712
Journal of Memory and Language (Academic)	759	113	.15	2,059
Journal of Pharmacology and Experimental Therapeutics (W & W)	4,022	220	.05	2,796
Journal of the Experimental Analysis of Behavior (SEAB)	774	54	.07	2,617
Learning and Motivation (Academic)	387	99	.26	909
Perception & Psychophysics (Pergamon)	897	86	.10	1,709
Pharmacology Biochemistry and Behavior (Pergamon)	3,143	495	.16	743
Physiology & Behavior (Pergamon)	3,152	575	.18	1,118
Psychological Record (Kenyon College)	576	32	.06	1,261
Psychopharmacology (Springer)	1,626	792	.49	unavailable
Psychophysiology (SPR)	726	50	.07	2,006

AABT: Association for the Advancement of Behavior Therapy.

APA: American Psychological Association.

PS: Psychonomic Society.

SEAB: Society for the Experimental Analysis of Behavior.

SPR: Society for Psychophysiological Research.

UCP: University of Chicago Press.

UIP: University of Illinois Press.

W & W: Williams & Wilkens.

* *Ulrich's International Periodicals Directory, 1986-87* (25th ed.).

** *Standard Periodicals Directory 1987* (10th ed.).

Other circulation data are from annual statements of ownership in the journals.

Let's examine Board membership over the last 30 years. The initial Board of Editors (Table 1 and Table 5, top) also served as the original SEAB Board. As we have seen, the group was quite homogeneous. Ferster, Boren, Schoenfeld, Sidman, and Verhave earned their doctorates at Columbia. Keller, of course, was on the faculty at Columbia, where he and Schoenfeld had been responsible for training all the other Columbia members of the Board. There were nine Harvard PhDs: Anger, Anliker, Azrin, Blough, Herrnstein, Keller, Lindsley, Morse, and Skinner. Only Dews, from the Department of Pharmacology at

Harvard Medical School, whose physiology PhD was from Minnesota following an English medical degree, and Brady, who trained at the University of Chicago in physiological psychology, came from different backgrounds. There were cross connections here, too. Ferster had just finished five years working at Harvard with Skinner; Anger had been an undergraduate at Columbia.

Originally, little thought had been given to how the organization was to perpetuate itself and provide for the infusion of new blood. This question arose at each Board meeting. Finally, a rotation plan was adopted in September,

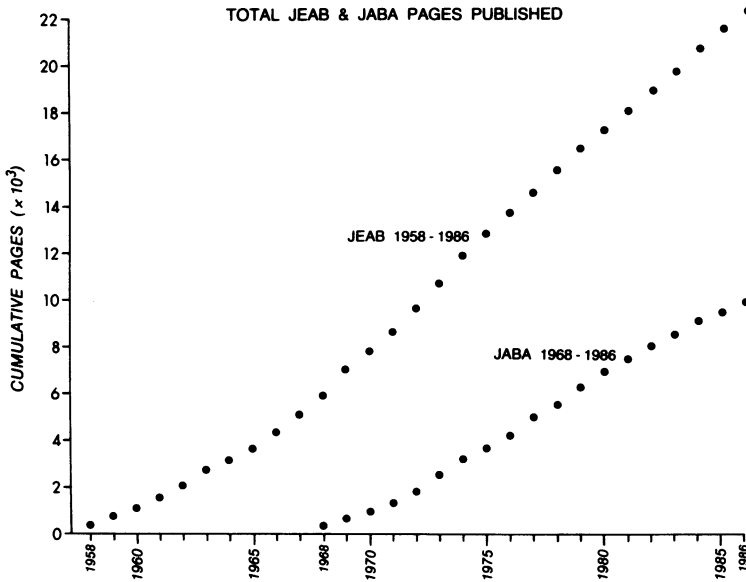


Fig. 7. Cumulative pages published by the *Journal of the Experimental Analysis of Behavior* (JEAB) and by the *Journal of Applied Behavior Analysis* (JABA).

1963, providing for directors to serve for an eight-year term and not be eligible for reelection for a year. The first two who rotated off the Board, Anliker and Keller, left after completing their 1963–64 year of service. Then in successive years went Anger and Herrnstein; Brady and Schoenfeld; Lindsley and Dinsmoor, the latter only elected in 1963 but mistakenly included in the rotation scheme by the lawyer who set it up; Boren and Morse; Dews, Ferster, and Sidman; Azrin and Skinner; and, finally, Blough and Verhave, the last of the original group. Thus, by September 1971, management of the two journals had been transferred to completely new hands, an unusual instance of founders of an enterprise giving up control rapidly.

By that time the presence of the second journal had begun to be reflected in Board membership; Baer and Wolf had been elected in 1968. Ayllon in 1969, Lovaas and Risley in 1970, and Leitenberg in 1971. By 1975, 15 of the 25 members were significantly involved in applied behavior analysis, including two former JEAB editors, Boren and Azrin.

There had by then been several reelections to the Board: Azrin in 1972, followed by Morse, Boren, and Dinsmoor in the next few years. For the first time women had joined the SEAB Board, reflecting their involvement in editing

the journals: Stolz in 1973 and Sulzer-Azaroff in 1975. (The expansion in Board size was allowed by a By-laws provision that permits between 16 and 27 members.) By late 1987 the SEAB Board of Directors had only one member from the founding group, Nate Azrin. Three members had been reelected twice, Catania, Nevin, and myself; Gollub, Fantino, Stolz, and Bailey were serving their second terms.

During SEAB's first years there was talk about becoming more than a publisher, but this never led to any changes because APA's Division 25 (Experimental Analysis of Behavior) was founded in 1964 with SEAB taking the lead in circulating the necessary petitions. (The question of attempting to start a division within APA was discussed by the Board as early as September 1959.) And then the emergence in the late 1970s of the Association for Behavior Analysis makes it highly unlikely that SEAB will ever become a general membership society. The only members it has, apart from its current Board of Directors, are former members of the Board (anyone once elected to the Board remains a member of the Society for life) and three persons who were elected to the Society directly in honor of their contributions to its health and welfare. Kay Dinsmoor, Business Manager of JEAB from

1959 to the present, was elected in 1970; Mary Louise Wright, Business Manager of JABA from 1967 to the present, and Garth Hopkins, Managing Editor of SEAB publications from 1962 to 1978, were elected in 1971.

Finally, two measures of SEAB's success in its publishing ventures can be seen in Figure 7 and in Table 6. The first shows that over 32,000 pages have been published since 1958. The second demonstrates that both journals have been welcomed in the scientific marketplace, each attracting a respectable number of subscribers.

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